

WHAT IS CLAIMED IS:

An apparatus for reducing outbreaks of aseptic inflammations of the eye resulting from eye surgery comprising a sterilizer for sterilizing medical instruments with steam comprising a housing containing a steam generator supplied by a dispensing pump and a sterilization container for containing said medical instruments, and further comprising a reservoir of distilled water which holds and supplies distilled water to be boiled for the sterilization, wherein said reservoir is separable from said housing and manufactured from a substance which can be subjected to sufficiently high temperatures to destroy endotoxins.

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2. The apparatus of claim 1 wherein said aseptic inflammation of the eye resulting from eye surgery is diffuse lamellar keratitis.

3. The apparatus of claim 1 wherein said aseptic inflammation of the eye resulting
15 from eye surgery is sterile endophthalmitis.

4. The apparatus of claim 1 wherein said reservoir is independent from said housing.

5. The apparatus of claim 1 wherein said reservoir is manufactured from
Pyrex glass.

6. The apparatus of claim 1 wherein said reservoir is manufactured from stainless steel.

25 7. The apparatus of claim 1 wherein said reservoir comprises a hollow vessel having a threaded neck to sealingly receive a threaded cap provided with means to receive a tubing for connecting said reservoir to said steam generating unit.

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8. The apparatus of claim 1 wherein said reservoir is adapted to be inverted in use and is provided with an air release valve which is opened when the reservoir is inverted and the system operating.
9. The apparatus of claim 1 wherein said reservoir is a disposable external reservoir.
10. The apparatus of claim 1 wherein said reservoir is a disposable, removable internal reservoir adapted to be removably contained within the housing of sterilizer 10
11. The apparatus of claim 7 wherein said disposable external reservoir is a bag of sterile endotoxin-free distilled water.
12. The apparatus of claim 7 wherein said disposable external reservoir is a bottle of sterile endotoxin-free distilled water.
13. A method for reducing outbreaks of aseptic inflammations of the eye resulting from eye surgery in eye surgery clinics using a sterilizer for sterilizing medical instruments with steam comprising a housing containing a steam generator supplied by a dispensing pump and a sterilization container for containing said medical instruments, and further comprising a reservoir of distilled water which holds and supplies distilled water to be boiled for the sterilization, said method comprising:
- i) at the start of a surgery day carrying out the following procedures on a sterilizer for sterilizing medical instruments with steam comprising a housing containing a steam generator supplied by a dispensing pump and a sterilization container for containing said medical instruments, and further comprising a reservoir which can be emptied by a pump, within said housing for receiving distilled water and which holds and supplies distilled water to be boiled for the sterilization:

1. Fill the empty reservoir with boiling tap water and drain using said pump;
2. Repeat step 1;
3. Rinse the reservoir by filling with distilled water and drain with said pump;
4. Repeat step 3;
5. Repeat step 3;
6. Prepare and conduct the first sterilization run of instruments.

ii) at the end of the surgery day carrying out the following procedures on said sterilizer

1. Drain the sterilizer reservoir with said pump;
2. Fill the reservoir with boiling water and scrub the entire inner surface of the reservoir with a clean brush;
3. Drain the reservoir with said pump;
4. Fill the reservoir with boiling water and scrub the entire inner surface of the reservoir, again with a clean brush;
5. Drain the reservoir with said pump;
6. Rinse the reservoir by filling and draining the reservoir three (3) times with distilled water;
7. Fill the reservoir with a solvent solution and scrub the inner surface of the reservoir with a clean brush;
8. Drain the reservoir with said pump;
9. Rinse the reservoir by filling and draining the reservoir three (3) times with distilled water;
10. Dry the inside of the reservoir;
11. Store the reservoir empty and allow to dry.

14. The method of claim 13 wherein said aseptic inflammation of the eye resulting from eye surgery is diffuse lamellar keratitis.

15. The method of claim 13 wherein said aseptic inflammation of the eye resulting from eye surgery is sterile endophthalmitis.

16. The method of claim 13 wherein said solvent solution is selected from the group
5 isopropyl alcohol, ethanol, methanol and acetone.

17. A method for reducing outbreaks of aseptic inflammations of the eye resulting
from eye surgery in eye surgery clinics using a sterilizer for sterilizing medical
instruments with steam comprising a housing containing a steam generator supplied by
10 a dispensing pump and a sterilization container for containing said medical instruments,
and further comprising a reservoir of distilled water which holds and supplies distilled
water to be boiled for the sterilization, said method comprising:

15 i) periodically carrying out the following procedures on a sterilizer for sterilizing
medical instruments with steam comprising a housing containing a steam
generator supplied by a dispensing pump and a sterilization container for
containing said medical instruments, and further comprising a reservoir within
said housing for receiving distilled water and which holds and supplies distilled
water to be boiled for the sterilization:

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1. Fill the empty reservoir with boiling tap water, add disinfectant, and scrub all
of the inner surface of the reservoir using a clean brush; and drain using said
pump;
 2. Repeat step 1 three more times;
 - 25 3. Fill the reservoir with boiling tap water and drain using said pump;
 4. Repeat step 3 two more times;
 5. Rinse the reservoir by filling with distilled water and drain with the pump.
 6. Repeat step 5 two more times;

7. Fill the reservoir with a solvent solution and scrub the inner surface of the reservoir with a clean brush;
8. Drain the reservoir with said pump;
9. Rinse the reservoir by filling and draining the reservoir three times with distilled water;
10. Dry the inside of the reservoir;
11. Store the reservoir empty and dry overnight;
12. Change the rubber tube inside the reservoir periodically.
18. The method of claim 17 wherein said aseptic inflammation of the eye resulting from eye surgery is diffuse lamellar keratitis.
19. The method of claim 17 wherein said aseptic inflammation of the eye resulting from eye surgery is sterile endophthalmitis.
20. The method of claim 17 wherein said procedures are carried out less frequently than a daily basis.
21. The method of claim 17 wherein said procedures are carried out on a quarterly basis.
22. The method of claim 17 wherein said solvent solution is selected from the group isopropyl alcohol, ethanol, methanol and acetone.
23. A method for reducing outbreaks of aseptic inflammations of the eye resulting from eye surgery in eye surgery clinics using a sterilizer for sterilizing medical instruments with steam comprising a housing containing a steam generator supplied by a dispensing pump and a sterilization container for containing said medical instruments,

and further comprising a reservoir of distilled water which holds and supplies distilled water to be boiled for the sterilization, said method comprising:

5 i) at the start of a surgery day carrying out the following procedures on a sterilizer for sterilizing medical instruments with steam comprising a housing containing a steam generator supplied by a dispensing pump and a sterilization container for containing said medical instruments, and further comprising a reservoir which can be emptied by a pump, within said housing for receiving distilled water and which holds and supplies distilled water to be boiled for the sterilization:

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1. Fill the empty reservoir with boiling tap water and drain using said pump;
 2. Rinse the reservoir by filling with distilled water and drain with said pump;
 6. Prepare and conduct the first sterilization run of instruments.

15 ii) at the end of the surgery day carrying out the following procedures on said sterilizer

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1. Drain the sterilizer reservoir with said pump;
 2. Fill the reservoir with boiling water and scrub the entire inner surface of the reservoir with a clean brush;
 3. Drain the reservoir with said pump;
 4. Rinse the reservoir by filling and draining the reservoir three (3) times with distilled water;
 5. Fill the reservoir with a solvent solution and scrub the inner surface of the reservoir with a clean brush;
 - 25 6. Drain the reservoir with said pump;
 7. Rinse the reservoir by filling and draining the reservoir three (3) times with distilled water;
 8. Dry the inside of the reservoir;

24. The method of claim 23 wherein said aseptic inflammation of the eye resulting from eye surgery is diffuse lamellar keratitis.

26. The method of claim 23 wherein said solvent solution is selected from the group isopropyl alcohol, ethanol, methanol and acetone.

i) periodically carrying out the following procedures on a sterilizer for sterilizing medical instruments with steam comprising a housing containing a steam generator supplied by a dispensing pump and a sterilization container for containing said medical instruments, and further comprising a reservoir within said housing for receiving distilled water and which holds and supplies distilled water to be boiled for the sterilization:

1. Fill the empty reservoir with boiling tap water, add disinfectant, and scrub all of the inner surface of the reservoir using a clean brush; and drain using said pump;
2. Fill the reservoir with boiling tap water and drain using said pump;

3. Rinse the reservoir by filling with distilled water and drain with the pump.
4. Fill the reservoir with a solvent solution and scrub the inner surface of the reservoir with a clean brush;
5. Drain the reservoir with said pump;
- 5 6. Rinse the reservoir by filling and draining the reservoir three times with distilled water;
7. Dry the inside of the reservoir;
8. Store the reservoir empty and dry overnight;
9. Change the rubber tube inside the reservoir weekly.

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28. The method of claim 27 wherein said aseptic inflammation of the eye resulting from eye surgery is diffuse lamellar keratitis.

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29. The method of claim 27 wherein said aseptic inflammation of the eye resulting from eye surgery is sterile endophthalmitis.

30. The method of claim 27 wherein said procedures are carried out less frequently than a daily basis.

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31. The method of claim 27 wherein said procedures are carried out on a quarterly basis.

32. The method of claim 27 wherein said solvent solution is selected from the group isopropyl alcohol, ethanol, methanol and acetone.

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Submitt 33. A method for reducing outbreaks of diffuse lamellar keratitis comprising carrying out the method of claim 13 on a daily basis and the method of claim 17 on a less frequent basis.

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37. The method of claim 34 wherein said solvent solution is selected from the group isopropyl alcohol, ethanol, methanol and acetone.

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